



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,359	09/24/2001	Yeong Jong Shin	K-262	6347

34610 7590 08/23/2004

FLESHNER & KIM, LLP  
P.O. BOX 221200  
CHANTILLY, VA 20153

EXAMINER
----------

ENG, GEORGE

ART UNIT	PAPER NUMBER
----------	--------------

2643

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/960,359

**Applicant(s)**

SHIN, YEONG JONG

**Examiner**

George Eng

**Art Unit**

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 5-9 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2643

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement filed 7/9/2004 (paper no. 4) has been considered.

### ***Claim Objections***

3. Claim 20 is objected to because of the following informalities: claim 20, "BTS" should be --BST-- to be corrected. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (US PAT. 6,628,943 hereinafter Agrawal) in view of Widegren et al. (US PAT. 6,374,112 hereinafter Widegren).

Regarding claim 1, Agrawal discloses a method for setting up a real time data call in a mobile communication system comprising the steps of setting up a call between an originating side mobile station (301, figure 3) and a termination side mobile station (302, figure 3), transferring bearer information between an origination base station controller (330-1, figure 3) and a termination base station controller (330-2, figure 3) through the set up call to set up a bearer path between the origination base station controller and termination base station controller, and transferring real time video data of at least one of the originating side mobile station and the termination side mobile station between the origination BSC and the termination BSC (col. 5 line 57 through col. 9 line 32 and col. 13 line 4 through col. 15 line 26). Agrawal differs from the claimed invention in not specifically teaching to transfer the real time video data between the origination BSC and the termination BSC through the set up bearer path. However, Widegren teaches a flexible radio access and resource allocation to support different types of media communication including speech, video and data capable of transferring video data through an established bearer channel (col. 5 line 29 through col. 7 line 40). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Agrawal in transferring the real time video data between the origination BSC and the termination BSC through the set up bearer path, as per teaching of Widegren, in order to flexibly provide a wide variety of mobile communication services and efficiently allocate resources to support those services.

Regarding claim 2, Widegren teaches to set up the call comprising the steps of defining a new option for a real time video call related to a speech call and a data call, inputting a termination side number in the newly defined option to initiate a real time video data call and

Art Unit: 2643

setting up origination and termination calls by the originating side and termination side mobile stations, the corresponding BSCs and the MSC (col. 9 lines 33-63 and col. 11 line 52 through col. 12 line 32).

Regarding claim 3, Agrawal discloses only the bearer path and a control path being set up during the call set up and wherein no other traffic path is set up (figures 2-3).

Regarding claim 4, Widegren discloses the originating base station controller and the designating base station controller defining a new service option for real time video data before the call is set up (col. 12 lines 33-62).

Regarding claims 10-12, Widegren teaches to clear the call and bearer path after the real time video data has been transferred comprising the steps of signaling to the core network service node, i.e., the MSC, to clear the bearer path, transferring a clear command from the core network service node to the origination and termination BSCs, and sending a message from each of the origination and termination BSCs to inform the core network service node of completing of the clearing, wherein the control path channel being used for communication between each of the origination and termination BSCs and the core network service node (col. 6 lines 34-67 and col. 7 lines 10-17).

Regarding claim 13, Widegren discloses the video data being transferred at a very high data rate between each of the origination and termination BSCs and the core network service node (col. 2 lines 35-48) so that one skill in the art would recognize the video data being transferred at a rate of at least 1 Mbps.

Regarding claim 14, Agrawal discloses a mobile communication system comprising an origination base station controller (330-1, figure 3) configured to manage and control at least one

Art Unit: 2643

origination device (301, figure 3), a termination base station controller (330-2, figure 3) configured to manage and control at least one termination device (302, figure 3), and a router coupled between the origination BSC and the termination BSC to allow for real time transfer of video data between the at least one origination device and at least one termination device (col. 5 line 57 through col. 9 line 32 and col. 13 line 4 through col. 15 line 26). Agrawal differs from the claimed invention in not specifically teaching the router coupled to form a direct bearer channel between the origination BSC and the termination BSC. However, Widegren teaches such (col. 5 line 29 through col. 7 line 40). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Agrawal in having the router coupled to form a direct bearer channel between the origination BSC and the termination BSC, as per teaching of Widegren, in order to flexibly provide a wide variety of mobile communication services and efficiently allocate resources to support those services.

Regarding claim 15, the limitations of the claim are rejected as the same reasons set forth in claim 13.

Regarding claims 16-17, Agrawal discloses the at least one origination device comprising an origination mobile terminal (1101, figure 11A) and at least one origination base station transceiver (1110, figure 11A) configured to form a radio interface with the origination mobile terminal, and at least one termination device comprising a termination mobile terminal (1102, figure 11A) and at least one termination base station transceiver (1115, figure 11A) configured to form a radio interface with the termination mobile terminal.

Art Unit: 2643

6. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (US PAT. 6,628,943 hereinafter Agrawal) in view of Widegren et al. (US PAT. 6,374,112 hereinafter Widegren) and Lopez-Torres (US PAT. 6,144,647).

Regarding claim 19, the combination of the Agrawal and Widegren differs from the claimed invention in not specifically teaching a home location register configured to provide storage of position information and process the position information of a plurality of mobile station within the network. However, it is old and notoriously well known in the art of a mobile communication system having a home location register for storing position information and processing position information of plurality of mobile stations in order to perform all the switching functions needed for mobiles located in an associated geographical area, for example see Lopez-Torres (col. 2 lines 32-44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of the Agrawal and Widegren in having the home location register configured to provide storage of position information and process the position information of a plurality of mobile station within the network, as per teaching of Lopez-Torres, in order to perform all the switching functions needed for mobiles located in an associated geographical area.

Regarding claim 20, Agrawal discloses a mobile communication system comprising an origination mobile station (1, figure 11A), a termination mobile station (2, figure 11A), at least one first base station transceiver (1110, figure 11A) configured to form a radio interface with the origination mobile station, an origination base station controller (1115, figure 11A) configured to manage and control the at least one first BST, at least one second based station transceiver (1155, figure 11A) to form a radio interface with the termination mobile station, a termination base

Art Unit: 2643

station controller (1145, figure 11A) configured to manage and control at least one second BST, and a router coupled between the origination BSC and the termination BSC to allow for real time transfer of video data between the origination side base station controller and the termination side base station controller (col. 5 line 57 through col. 9 line 32 and col. 13 line 4 through col. 15 line 26). Agrawal differs from the claimed invention in not specifically teaching the router to establish a direct link between the origination BSC and the termination BSC, and a mobile switch center to control calls of the origination BSC and the termination BSC. However, Widegren teaches such (col. 5 line 29 through col. 7 line 40). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Agrawal in having the router coupled to form a direct bearer channel between the origination BSC and the termination BSC, and the mobile switch center, i.e., core network interface node, to control calls of the origination BSC and the termination BSC, as per teaching of Widegren, in order to flexibly provide a wide variety of mobile communication services and efficiently allocate resources to support those services. The combination of the Agrawal and Widegren differs from the claimed invention in not specifically teaching a home location register configured to provide storage of position information and process the position information of a plurality of mobile station within the network. However, it is old and notoriously well known in the art of a mobile communication system having a home location register for storing position information and processing position information of plurality of mobile stations in order to perform all the switching functions needed for mobiles located in an associated geographical area, for example see Lopez-Torres (col. 2 lines 32-44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the



combination of the Agrawal and Widegren in having the home location register configured to provide storage of position information and process the position information of a plurality of mobile station within the network, as per teaching of Lopez-Torres, in order to perform all the switching functions needed for mobiles located in an associated geographical area.

***Allowable Subject Matter***

7. Claims 5-9 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rinne et al. (US 20010046861A1) discloses a method and system for controlling radio communications between a mobile station and a communication system for data communications (abstract). Alperovich et al. (US PAT. 6,317,609) discloses a telecommunication system and method for transmitting digital images produced by a camera attached to a mobile station to a receiving terminal through Internet (abstract). Friman (US PAT. 6,061,566) discloses a mobile communication system for allowing calls to be established between mobile stations located in an area or a same base station system (col. 3 line 62 through col.5 line 32).

9. Any response to this action should be mailed to:

Art Unit: 2643

Commissioner of Patents and Trademarks

Washington D.C. 20231

Or faxed to:

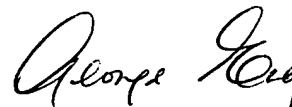
(703) 872-9306 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, V.A., Sixth Floor (Receptionist).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tuesday to Friday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz, can be reached on (703) 305-4870. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



George Eng  
Primary Examiner  
Art Unit 2643